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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,774	01/16/2002	Raymond T. Hsu	PA020106	1529
23696	7590	12/16/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			ESCALANTE, OVIDIO	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,774	HSU ET AL.	
	Examiner	Art Unit	
	Ovidio Escalante	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-10,13,15-19,22,23,27-31,34,35 and 37-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-10,13,15-19,22,23,27-31,34,35 and 37-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on October 18, 2004. **Claims 1-5,8-10,13,15-19,22-23,27-31,34-35,37-38 and 39-64** are now pending in the present application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 18, 2004 has been entered.

Response to Amendment

3. The newly added claims have been renumbered since there was an obvious typographical error with claim 40. There were two listings of claim 40. Therefore, the second 40 will be listed as claim 41 and all claims following the renumbered claim 41 will be changed accordingly and all dependencies have been changed. Please make this correction formally in the next response.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Siddiqui et al. US Patent 6,826,176.

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Regarding claim 39, Siddiqui teaches a method comprising: providing a BCMCS_ID (Broadcast Message Identifier) (abstract; col. 6, line 50-col. 7, line 21) comprising mapping information between an IP multicast address and a UDP port number associated with the broadcast service, (col. 2, lines 7-25; col. 3, lines 44-53; col. 4, line 45-col. 5, line 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1,38 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. US Patent Pub. 2003/0054807 in view of Siddiqui et al. US Patent 6,826,176.

Regarding claims 1,38 and 64, Hsu teaches in a wireless communication system and apparatus supporting a broadcast service, (paragraphs 13 and 71), a method and means for:

providing a BCMCS_ID to identify the broadcast service, (paragraph 60 and fig. 8; “RTP/UDP/IP”);

sending the BCMCS_ID to a base station (fig. 4; paragraphs 49 and 60);

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configuring a broadcast service parameters message at the base station that includes the BCMCS_ID , (paragraph 60);

transmitting the broadcast service parameters message to a mobile station (fig. 4; paragraph 60) and;

using the BCMCS_ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector, (paragraphs 83,89 and 93).

Hsu does not specifically teach wherein an IP multicast address and UDP port number are associated with said BCMCS_ID.

In the same field of endeavor, Siddiqui teaches wherein an IP multicast address and UDP port number are associated with said BCMCS_ID, (abstract; col. 2, lines 7-25; col. 3, lines 44-53; col. 4, line 45-col. 5, line 4; col. 6, line 50-col. 7, line 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hsu by associating an IP multicast address and UDP port number with the broadcast service as taught by Siddiqui so that data packets can be routed through the IP network.

9. Claims 1-3,5,15-17,19,27-29,31,37-44,49-53,56-60,63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Siddiqui et al. US Patent 6,826,176.

Regarding claims 1,38,39,40 and 64, Sato teaches in a wireless communication system and apparatus supporting a broadcast service, (abstract; fig. 24), a method and means for:

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providing a BCMCS_ID to identify the broadcast service, (fig. 25; page 38, line 17-page 39, line 2; [¶185, ¶186]), wherein an IP multicast address is associated with said BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

sending the BCMCS_ID to a base station (fig. 25; 110-1; page 38, lines 17-23; [¶185]);

configuring a broadcast service parameters message at the base station that includes the BCMCS_ID , (page 38, line 17-page 39, line 2; page 40, lines 25-page 41, line 5; [¶185, ¶186, ¶195]);

transmitting service parameters message to a mobile station (120), (page 32, line 24-page 33, line 1; page 38, line 17-page 39, line 2; page 40, line 25-page 41, line 5; [¶155, ¶185, ¶186, ¶197]); and

using the BCMCS_ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector, (page 29, lines 7-10; page 40, lines 25-page 41, line 5; [¶59, ¶197]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID , Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID . However, Sato suggests this since Sato teaches of using the Internet for transmitting the broadcast service information and it was well known in the art that UDP is used with the TCP/IP protocol for generating packets in the Internet system.

Nonetheless, in the same field of endeavor, Siddiqui teaches of a wireless communication system and apparatus supporting a broadcast service, (abstract; col. 6, line 50-col. 7, line 21) and providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and

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UDP port number are associated with said BCMCS_ID , (col. 2, lines 7-25; col. 3, lines 44-53; col. 4, line 45-col. 5, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

Regarding claims 2,41 and 51, 58, Sato, as applied to claim 1,39 and 50, teaches wherein the broadcast service is transmitted by a content server, (page 24, lines 17-24; [¶112]).

Regarding claims 3 and 42, Sato, as applied to claims 2 and 41, teaches wherein the broadcast service has a service name (program title), (fig. 25).

Regarding claim 5,19,31,43,44,52,53,59 and 60, Sato, as applied to claims 3,16,28,42,50 and 57, teaches wherein the BCMCS_ID is a globally unique BCMCS_ID issued by a global issuer, (fig. 2; page 4, lines 13-26; [¶15]; servers 251,252,253 issue a unique service ID to other servers).

Regarding claim 15,27,37,49,56 and 63, Sato, as applied to claims 1,16,28,39,50 and 57, teaches wherein the BCMCS_ID is a dual BCMCS_ID comprising a global indicator to indicate uniqueness of the BCMCS_ID, (fig. 25; page 38, line 24-page 39, line 2; [¶186]).

Regarding claims 16 and 50, Sato teaches a base station (110-1) for use in a wireless communication system supporting a broadcast service, (abstract; fig. 24), wherein the base station is receiving a first broadcast service identified by a first BCMCS_ID , wherein an IP Multicast address is associated with said first BCMCS_ID , (fig. 25; page 38, line 24-page 39,

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line 2) and wherein the base station has a neighbor base station receiving a second broadcast service identified by a second BCMCS_ID , (fig. 24; page 40, lines 25-page 41, line 5; page 42, lines 22-page 43, line 1; [¶197, ¶206]), wherein an IP multicast address is associated with said second BCMCS_ID and wherein the base station is configured to implement a method comprising:

receiving the second BCMCS_ID that identifies the second broadcast service, (page 40, line 25-page 41, line 5; [¶197]);

configuring neighbor configuration data that relates to the second broadcast service, (page 40, line 25-page 41, line 5; page 42, lines 1-6; [¶197, ¶202]);

configuring a broadcast service parameters message that includes the second BCMCS_ID and the neighbor configuration data, (page 42, lines 22-page 43, line 20; [¶206-¶209]); and

transmitting the broadcast service parameters message to a mobile station currently receiving the first broadcast service, (page 32, line 24-page 33, line 1; page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶155, ¶197, ¶206]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID , Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID .

In the same field of endeavor, Siddiqui teaches of a wireless communication system and apparatus supporting a broadcast service, (abstract; col. 6, line 50-col. 7, line 21) and providing a BCMCS_ID to identify the broadcast service, wherein said BCMCS_ID comprising mapping information between an IP multicast address and UDP port number associated with the broadcast service, (col. 2, lines 7-25; col. 3, lines 44-53; col. 4, line 45-col. 5, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

Regarding claims 17,29 and 51, Sato, as applied to claims 16,28 and 50, teaches wherein the first broadcast service and the second broadcast service are transmitted by content servers, (fig. 3; page 3, line 29-page 4, line 8; page 24, lines 17-24, [¶13, ¶112]).

Regarding claims 28 and 57, Sato teaches a mobile station (120) for use in a wireless communication system supporting a broadcast service, wherein the mobile station is in a first sector of a first base station approaching a second sector of a second base station, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶197, ¶206]) and wherein the mobile station is configured to implement a method comprising:

receiving a first broadcast service identified by a first BCMCS_ID from the first base station, (page 32, line 24-page 33, line 1; page 38, line 17-page 39, line 2; page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1, [¶155, ¶197, ¶206]), wherein an IP multicast address is associated with said first BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

receiving a broadcast service parameters message that includes a second BCMCS_ID and neighbor configuration data, wherein the second BCMCS_ID identifies a second broadcast service available in the second sector, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶197, ¶206]), wherein the IP multicast address is associated with the second BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

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examining the neighbor configuration data that relates to the second broadcast service, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 8; [¶197, ¶206-¶207]); and

determining, based on the neighbor configuration data, whether the first BCMCS_ID and the second BCMCS_ID identify the same broadcast content whereby reception of the broadcast content is continued in the second sector, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 20; [¶197, ¶206-¶209]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID, Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID.

In the same field of endeavor, Siddiqui teaches of a wireless communication system and apparatus supporting a broadcast service, (abstract; col. 6, line 50-col. 7, line 21) and providing a BCMCS_ID to identify the broadcast service, wherein said BCMCS_ID comprises mapping information between an IP multicast address and UDP port number associated with said broadcast service, (col. 2, lines 7-25; col. 3, lines 44-53; col. 4, line 45-col. 5, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

10. Claims 4,8,9,10,13,18,22,23,30,34,35,45-48 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Siddiqui and further in view of Chang et al. US Patent Pub. 2002/0102967.

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Regarding claims 4,8,9,10-13,18,22-25,30,34,35,45-48,54-55,61 and 62 while Sato teaches of receiving by the content server a BCMCS_ID , Sato does not specifically teach of requesting by the content server the BCMCS_ID .

However, Sato suggests this since the mobile terminal is requesting content and the content server must be able to request information if the content server is able to retrieve and transmit the information to the mobile terminal.

Nonetheless, in the same field of endeavor, Chang teaches that it was well known in the art to request by a content server a BCMCS_ID from a global/local issuer, (fig. 2; paragraphs 10-13). Chang further teaches dynamically generating a BCMCS_ID and associating a lifetime value with the BCMCS_ID, (paragraphs 9 and 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by requesting content from a global or local issuer and generating a BCMCS_ID as suggested by Chang so that the content server can request data based upon the mobile terminal's needs.

Response to Arguments

11. Applicant's arguments with respect to claims 1-5,8-10,13,15-19,22-23,27-31,34-35,37-38 and 39-64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

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(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

220 20th Street S.
Crystal Plaza two, Lobby, Room 1B03
Arlington, VA 22202

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 703-308-6262. The examiner can normally be reached on M-F (6:30AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OVIDIO ESCALANTE
PATENT EXAMINER



O.E./oe

Ovidio Escalante
Examiner
Group 2645
December 3, 2004